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Europäisches
Patentamt

Zweigstelle
in Den Haag
Recherchen-
Abteilung

European
Patent Office

Branch at
The Hague
Search
division

Office européen
des brevets

Département à
La Haye
Division de la
recherche

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Dr. Gassner & Partner
Patentanwälte

Datum/Date

01.12.04

Zeichen/Ref./Réf.

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Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

03021363.1

Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

COMMUNICATION

The European Patent Office herewith transmits

- ☒ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☐ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

- ☒ Abstract ☐ Title ☒ Figure
- ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
- ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

- ☒ Additional copy(copies) of the documents cited in the European search report.

(02)

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



EPO Form 1507 02.93



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	LI D ET AL: "Classification of general audio data for content-based retrieval" PATTERN RECOGNITION LETTERS, NORTH-HOLLAND PUBL. AMSTERDAM, NL, vol. 22, no. 5, April 2001 (2001-04), pages 533-544, XP004233004 ISSN: 0167-8655	1	
A	* abstract; figure 2 * * page 543, left-hand column, line 24 - line 28 *	6,8,11	
A	----- "TEXT OF ISO/IEC CD 15938-4 INFORMATION TECHNOLOGY - MULTIMEDIA CONTENT DESCRIPTION INTERFACE - PART 4 AUDIO" ISO/IEC JTC1/SC29/WG11 NWXYZ, 14 March 2001 (2001-03-14), XP002304125 * paragraph '4.3.17! *	18-20	
A	----- US 6 163 765 A (HERKERT ARTHUR GERALD ET AL) 19 December 2000 (2000-12-19) * abstract * * column 3, line 63 - column 5, line 19; figure 6 *	18-20	
A	----- HANSEN J H L ET AL: "FEATURE ANALYSIS AND NEURAL NETWORK-BASED CLASSIFICATION OF SPEECH UNDER STRESS" IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING, IEEE INC. NEW YORK, US, vol. 4, no. 4, July 1996 (1996-07), pages 307-312, XP000785307 ISSN: 1063-6676 * abstract * * page 309, right-hand column, line 27 - page 310, left-hand column, line 11 * ----- -/--	18-20	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 November 2004	Examiner Zimmermann, E
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			

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EPO FORM 1503 03 82 (P04C01)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	GHIAS A ET AL: "QUERY BY HUMMING MUSICAL INFORMATION RETRIEVAL IN AN AUDIO DATABASE" PROCEEDINGS OF ACM MULTIMEDIA '95 SAN FRANCISCO, NOV. 5 - 9, 1995, NEW YORK, ACM, US, 5 November 1995 (1995-11-05), pages 231-236, XP000599035 ISBN: 0-201-87774-0	21,22,24	
A	* abstract * * page 232, left-hand column, line 27 - line 37 * * page 233, right-hand column, line 6 - line 23 * -----	23	
X	WO 95/27976 A (HAL TRUST L L C) 19 October 1995 (1995-10-19) * page 28, line 14 - page 31, line 17; figures 6,7 * * page 50, line 28 - page 51, line 29 * -----	25-28	
A	CHAKRABORTY B ET AL: "Feature subset evaluation using fuzzy measures" INTELLIGENT INFORMATION SYSTEMS, 1995. ANZIIS-95. PROCEEDINGS OF THE THIRD AUSTRALIAN AND NEW ZEALAND CONFERENCE ON PERTH, WA, AUSTRALIA 27 NOV. 1995, NEW YORK, NY, USA, IEEE, US, 1995, pages 220-225, XP010295593 ISBN: 0-86422-430-3 * page 222, line 25 - line 32 * ----- -/--	25-30	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Place of search Munich		Date of completion of the search 5 November 2004	Examiner Zimmermann, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03 82 (P04C01)



DOCUMENTS CONSIDERED TO BE RELEVANT							
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)				
X	POLITIS D ET AL: "An audio signatures indexing scheme for dynamic content multimedia databases" MELECON 2000. 10TH. MEDITERRANEAN ELECTROTECHNICAL CONFERENCE, IEEE, vol. 2, 29 May 2000 (2000-05-29), pages 725-728, XP010517893 * abstract; figure 2 * * page 726, left-hand column, line 2 - right-hand column, line 5 * -----	25,26					
E	EP 1 391 876 A (SONY INT EUROP GMBH) 25 February 2004 (2004-02-25) * abstract; figure 1 * -----	25-30					
Y	WO 01/28240 A (KONINKL PHILIPS ELECTRONICS NV) 19 April 2001 (2001-04-19) * abstract * * page 2, line 7 - line 12 * * page 4, line 27 - line 33 * * page 11, line 12 - line 15 * -----	31,33,34					
A		32		TECHNICAL FIELDS SEARCHED (Int.Cl.7)			
Y	US 5 973 723 A (DELUCA MICHAEL JOSEPH) 26 October 1999 (1999-10-26) * abstract; figure 2 * * column 2, line 19 - column 3, line 18 * -----	33					
A	US 5 708 477 A (FORBES FRED FRANKLIN ET AL) 13 January 1998 (1998-01-13) * abstract * * column 2, line 21 - line 37 * -----	31-34					
A	DE 36 34 750 A (THOMSON BRANDT GMBH) 14 April 1988 (1988-04-14) * column 3, line 61 - column 4, line 18; figure 2 * -----	32					
The present search report has been drawn up for all claims							
Place of search Munich		Date of completion of the search 5 November 2004	Examiner Zimmermann, E				
<table><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document</td></tr><tr><td>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</td><td></td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	
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EPO FORM 1533 03 82 (P04C01)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-5, 14-17

1.1. claims: 1-5

Feature quantity extraction with a particular division of the frequency spectrum.

1.2. claims: 14-17

Feature quantity extraction involving determination of effective values to derive feature quantities.

2. claims: 6-13

Feature quantity extraction involving determination of peak values to derive feature quantities.

3. claims: 18-20

Feature quantity extraction involving determination of a cross-correlation in band spectra to derive feature quantities.

4. claims: 21-24

Feature quantity extraction involving determination of a cross-correlation in a time domain to derive feature quantities.

5. claims: 25-30

Feature quantity extraction involving determination of an envelope curve for calculating values related to respective extremums of the envelope curve as feature quantities.

6. claims: 31-34

Program recording / reproduction apparatus wherein operation is controlled depending on a feature comparison.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 02 1363

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-11-2004

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